

shape, because of the initial resilient return when first released. The relatively small diameter of the introducer 2 enables it to be inserted correctly more easily than the larger diameter tube 1. Insertion is also aided by the bend in the introducer 2 and by its smaller diameter, which makes it easier to see the patient end of the introducer during insertion. After the initial resilient return, the introducer 2 tends to return to its original shape but this is prevented, in part, by the constraint of the anatomy. The tracheal tube 1 is then slid along the introducer 2 until its patient end 11 is correctly located in the trachea, leaving the machine end 14 protruding a short distance from the patient's mouth, as shown in FIG. 2. The tube 1 is more bendable than the introducer 2 so that it conforms to the shape of the introducer. The introducer 2 is then pulled out, whilst holding the tube 1, to leave the tube in position, as shown in FIG. 3. This technique of introduction is the same as with conventional introducers.

The introducer may be made from an aliphatic polyurethane with a different hardness although generally the range 50 Shore A to 80 Shore D will be the most satisfactory. The introducer need not be a solid rod but could be a tube, so that the bore of the tube could be used, for example, for oxygen insufflation or to monitor carbon dioxide levels to detect for correct positioning of the tube. When the introducer is a tube, it will generally need to be made from a harder material because of its thinner wall, up to about 90 Shore D. The introducer need not be entirely of an aliphatic polyurethane. It could, for example, have a tip of a softer material or a coating of a different material. A braided outer sleeve could be placed on the body of the introducer and the introducer then dip coated in a varnish, such as an aqueous polyurethane or an alkyd resin varnish. The use of the braid would improve the torsional rigidity of the introducer compared with a plain aliphatic polyurethane rod. Fewer coatings would be needed than with conventional introducers made entirely from a resincoated braided sleeve.

A similar device could be used to assist introduction of a tracheal tube by acting as a stylet, that is, by being inserted into the tube and bending the assembly of the tube and stylet to the desired shape. The assembly of the introducer and the

tube are then inserted together into the trachea. The introducer device/stylet is removed after correct location, leaving the tube in position. With such an arrangement, the purpose of the introducer device is to enable the tube to be bent to a shape that facilitates insertion. The hardness of such a device is preferably about 72 Shore D with the addition of about 20% barium sulphate to increase the stiffness and make it more opaque to X-rays.

The invention is not limited to introducers for tracheal tubes but could be used for introducers for introducing other tubes.

The present invention enables an introducer to be made with a considerable saving in manufacturing time and cost compared with conventional braided introducers, even when a braided outer sleeve is used.

What I claim is:

1. An assembly comprising: a medical tube, said medical tube is an endotracheal tube adapted and sized for insertion into the trachea and having a bore extending along its length; and an introducer, said introducer extending along the bore of said tube, wherein said introducer is a solid rod, said rod being of an aliphatic polyurethane material, and wherein said material is selected such that said assembly is resilient within a range of deformation and beyond this range it is bendable into a set shape that resumes its original shape at a slower rate.

2. An assembly according to claim 1, wherein said material has a hardness between about 50 Shore A and 80 Shore D.

3. An assembly according to claim 2, wherein said material has a hardness of about 60 Shore D.

4. An assembly according to claim 1, wherein said material contains barium sulphate.

5. An assembly according to claim 4, wherein said material contains about 20% barium sulphate.

6. An assembly according to claim 1, wherein said assembly has a bend at its patient end.

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